

## **Amendments to the Specification:**

Please amend the title:

~~IRON-BASED CASTING ALLOW AND PROCESS FOR MAKING SAME~~

### **PROCESS FOR MAKING IRON-BASED CASTING ALLOY**

Please amend the paragraphs beginning on page 2, at line 2 as shown below:

One object of the present invention is to provide an improved process for making an iron-based casting alloy having improved combinations of toughness, abrasion resistance and corrosion resistance.

In carrying out the above object, the ~~casting alloy process~~ of the invention ~~includes an iron matrix having primary carbides (MC) selected from vanadium carbides, niobium carbides, titanium carbides, and combinations of these carbides with substantially no eutectic MC carbides. The alloy also includes eutectic chromium carbides ( $M_7C_3$ ) with substantially no primary chromium carbides~~ for making the iron-based casting alloy is performed by precipitating eutectic chromium carbides of a first alloy system and primary carbides of a second alloy system including either vanadium carbides, niobium carbides, titanium carbides or combinations of these carbides. The primary carbides are precipitated at a primary carbide liquidus of the second alloy system which has a eutectic that is maintained below an austenite liquidus of the first alloy system to prevent formation of eutectic carbides of the second alloy system.

The eutectic chromium carbides of the first alloy system are precipitated at a eutectic thereof without forming primary chromium carbides.

Proeutectic austenite can be precipitated at an austenite liquidus of the first alloy system prior to the precipitation of the eutectic chromium carbides.

Please delete the paragraphs beginning on page 2, at line 14 as shown below:

~~The alloy may also include proeutectic austenite that forms before eutectic austenite that forms with the eutectic chromium carbide.~~

~~Another object of the present invention is to provide an improved process for making an iron-based castable alloy having improved combinations of toughness, abrasion resistance and corrosion resistance.~~

~~In carrying out the immediately preceding object, the process for making the casting alloy is performed by precipitating in an iron matrix primary carbides (MC) of vanadium carbides, niobium carbides, titanium carbides, or combinations thereof, and by forming eutectic chromium carbides ( $M_7C_3$ ) and eutectic austenite without forming any substantial amount of primary chromium carbides.~~

Please delete the paragraph beginning on page 3, at line 1 as shown below:

~~It is also possible for the process to be performed by precipitating proeutectic austenite before forming the eutectic chromium carbides and eutectic austenite.~~

Please amend the Abstract on page 11 as shown below:

[[An]] A process for making an iron-based casting alloy ~~and a process for making the alloy are provided~~ is performed by combining an iron-carbon-chromium system with primary carbides of vanadium, niobium, titanium, or combinations thereof without [[any]] eutectic carbides of vanadium, niobium and titanium. Eutectic chromium carbides ( $M_7C_3$ ) are

also formed without [[any]] primary chromium carbides. Proeutectic austenite can also be formed in the alloy.